

Amendments to the Claims:

Claims 18-20, 36 and 38 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-4. (Canceled)

5. (Previously Presented) A deframer for a wireless communication device, comprising:

an input interface unit operative to receive data to be deframed in one or more Radio Link Protocol (RLP) packets;

a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values, the detection unit is operative to detect for flag and escape bytes on the received data;

a state control unit operative to provide a first set of control signals indicative of specific task to be performed for deframing based in part on the detected bytes of specific values; and

a conversion unit operative to deframe the received data based on the first set of control signals to provide deframed data, the conversion unit being operative to remove flag and escape bytes in the received data.

6. (Previously Presented) A deframer for a wireless communication device, comprising:

an input interface unit operative to receive data to be deframed;

a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values and operative to detect for and remove flag and escape bytes in the received data;

a state control unit operative to provide a first set of control signals indicative of specific tasks to be performed for deframing based in part on the detected bytes of specific values; and

a conversion unit operative to deframe the received data based on the first set of control signals to provide deframed data and further operative to un-escape a data byte following each detected escape byte in the received data.

7. (Previously Presented) A deframer for a wireless communication device, comprising:

an input interface unit operative to receive data to be deframed;

a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values and operative to detect for flag and escape bytes in the received data;

a state control unit operative to provide a first set of control signals indicative of specific tasks to be performed for deframing based in part on the detected bytes of specific values; and

a conversion unit operative to deframe the received data based on the first set of control signals to provide deframed data and further operative to provide a header word for each detected flag byte in the received data.

Claims 8-14. (Canceled)

15. (Previously Presented) A deframer for a wireless communication device, comprising:

an input interface unit operative to receive data to be deframed;

a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values;

a state control unit operative to provide a first set of control signals indicative of specific tasks to be performed for deframing based in part on the detected bytes of specific values; and

a conversion unit operative to deframe the received data based on the first set of control signals to provide deframed data, and operative to deframe a block of data for each deframing operation, and further operative to provide a first header for a start of the data block.

Claims 16. (Canceled)

17. (Previously Presented) A deframer for a wireless communication device, comprising:

an input interface unit operative to receive data to be deframed;

a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values;

a state control unit operative to provide a first set of control signals indicative of specific tasks to be performed for deframing based in part on the detected bytes of specific value; and

a conversion unit operative to deframe the received data based on the first set of control signals to provide deframed data,

wherein the deframer is in one of a plurality of operating states at any given moment, and wherein the operating states include an idle state indicative of no deframing being performed and a process state indicative of deframing being performed, and wherein the operating states further include an escape state indicative of processing for an escape byte and a header state indicative of generation of a header for the deframed data.

18. (Currently Amended) A deframer for a wireless communication device, comprising:

an input interface unit operative to receive an RLP packet of data to be deframed, one word at a time, and for each received word provide one data byte at a time for subsequent processing, and wherein the RLP packet includes one or more complete or partial PPP packets having a format defined by RFC1662;

a detection unit operative to evaluate each data byte from the input interface unit to detect for flag, escape, and invalid bytes;

a state control unit operative to provide a first set of control signals indicative of specific tasks to be performed for deframing based in part on the detected bytes of specific value;

a conversion unit operative to deframe the received data based on the first set of control signals and to process each data byte from the interface unit by removing flag and escape bytes, un-escaping a data byte following each escape byte, providing a header word for each flag byte, and checking each deframed packet based on a frame check sequence (FCS) value associated with the packet; and

an output interface unit operative to provide deframed data.

19. (Currently Amended) An integrated circuit for a wireless communication device, comprising:

an input interface unit operative to receive an RLP packet of data to be deframed, one word at a time, and for each received word provide one data byte at a time for subsequent processing, and wherein the RLP packet includes one or more complete or partial PPP packets having a format defined by RFC1662;

a detection unit operative to evaluate each data byte from the input interface unit to detect for flag, escape, and invalid bytes;

a state control unit operative to provide a first set of control signals indicative of specific tasks to be performed for deframing based in part on the detected bytes of specific value;

a conversion unit operative to deframe the received data based on the first set of control signals and to process each data byte from the interface unit by removing flag and escape bytes,

un-escaping a data byte following each escape byte, providing a header word for each flag byte, and checking each deframed packet based on a frame check sequence (FCS) value associated with the packet; and

an output interface unit operative to provide deframed data.

20. (Currently Amended) A method of deframing an RLP packet of data comprising one or more PPP packets having a format defined by RFC1662, the method comprising:

receiving the RLP packet, one word at a time;

evaluating each byte of each received word to detect for flag and escape bytes;

providing status signals indicative of each detected flag and escape byte;

removing the flag and escape bytes based on the status signals;

un-escaping a data byte following each detected escape byte;

checking each PPP packet based on an FCS value associated with the packet; and

providing deframed data.

Claims 21-25. (Canceled)

26. (Original) A framer for a wireless communication device, comprising:

an input interface unit operative to receive data to be framed in one ore more Radio Link Protocol (RLP) packets;

a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values;

a state control unit operative to provide a first set of control signals indicative of specific task to be performed for framing based in part on the detected bytes of specific values; and

a conversion unit operative to frame the received data based on the first set of control signals and to provide framed data, the conversion unit is operative to insert an escape byte upon detection of a data byte having one of the specific values.

Claims 27-32. (Canceled)

33. (Previously Presented) A framer for a wireless communication device, comprising:

- an input interface unit operative to receive data to be framed in one or more Radio Link Protocol (RLP) packets;

- a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values;

- a state control unit operative to provide a first set of control signals indicative of specific tasks to be preformed for framing based in part on the detected bytes of specific values;

- and

- a conversion unit operative to frame the received data based on the first set of control signals and to provide framed data;

wherein the framer is in one of a plurality of operating states at any given moment, and wherein the operating states include an idle state indicative of no framing being preformed and a process state indicative of framing being preformed, the operating states further include an escape state indicative of processing for an escape byte.

Claims 34-35. (Canceled)

36. (Currently Amended) A framer for a wireless communication device, comprising:
an input interface unit operative to receive a packet of data to be framed in one or more Radio Link Protocol (RLP) packets, one word at a time, and for each received word provide one data byte at a time for subsequent processing;

- a detection unit operative to evaluate each data byte from the input interface unit to detect for bytes of specific values;

- a state control unit operative to provide a first set of control signals indicative of specific tasks to be preformed for framing based in part on the detected bytes of specific values;

- a conversion unit operative to frame the received data based on the first set of control

signals and to process each data byte from the interface unit to frame the received data by inserting an escaped byte for each data byte to be escaped and escaping the data byte, inserting a flag byte in response to receiving a first command, and inserting an FCS value in response to receiving a second command; and

an output interface unit operative to provide framed data having a format defined by RFC1662.

Claim 37. (Canceled)

38. (Currently Amended) A method of framing a packet of data to provide framed data having a format defined by RFC1662, comprising:

receiving the packet of data, one word at a time;

evaluating each data byte of each received word to detect for bytes to be escaped;

providing a status signal indicative of each data byte to be escaped;

inserting an escape byte for each data byte to be escaped and escaping the data byte based on the status signal;

inserting a flag byte in response to receiving a flag insert command;

inserting an FCS value in response to receiving an FCS insert command; and

providing framed data having the format defined by RFC1662.

Claims 39-52. (Canceled)